UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

VIA ELECTRONIC MAIL
DELIVERY RECEIPT REQUESTED

Ron Witalka
Terminal Superintendent
CF Industries Distribution
737 E. DuPont Road
Seneca, IL 61360

Re: Finding of Violation
CF Industries Distribution
Seneca, Illinois

Dear Harley Potratz:

The U.S. Environmental Protection Agency (EPA) is issuing the enclosed Finding of Violation (FOV) to CF Industries Distribution ("CF Industries" or "you") under Section 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(3). EPA finds that you are violating certain provisions of the Chemical Accident Prevention Provisions (CAPP), codified at 40 C.F.R. Part 68, as well as Section 112(r)(7)(E) of the Clean Air Act, 42 U.S.C. § 7412(r)(7)(E), at your Seneca, Illinois facility.

Section 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(3), gives EPA several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with EPA about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, you are encouraged to submit information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to participate in the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Veronica Fischer. You may call her at (312) 353-5685 or email her at fischer.veronica@epa.gov to request a conference. You should make the request within 10 calendar days following receipt of this letter. Any conference should be held within 30 calendar days following receipt of this letter.

Sincerely,

CONSTANTINOS LOUKERIS

Digitally signed by CONSTANTINOS LOUKERIS
Date: 2022.09.28 14:48:48 -05'00'

Sarah Marshall
Supervisor
Air Enforcement and Compliance Assurance Section (MI/WI)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:	)	
	)	
CF Industries Distribution	)	**FINDING OF VIOLATION**
Seneca, Illinois	)	
	)	**EPA-5-22-IL-15**
	)	
Proceedings Pursuant to	)	
the Clean Air Act,	)	
42 U.S.C. §§ 7401 et seq.	)	
	)	

FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) finds that CF Industries Distribution (CF Industries) is violating Section 112(r)(7)(E) of the Clean Air Act (the Act), 42 U.S.C. § 7412(r)(7)(E), and certain regulatory provisions set forth in the Chemical Accident Prevention Provisions (CAPP), codified at 40 C.F.R. Part 68. The statutory and regulatory authority, as well as a description of the specific violations, are set forth below:

I. Statutory and Regulatory Authority

A. Clean Air Act, Subsection 112(r)

1. Section 112(r)(1) of the Act, 42 U.S.C. § 7412(r)(1), provides that it shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to Section 112(r)(3), or any other extremely hazardous substance.

2. Section 112(r)(3) of the Act, 42 U.S.C. § 7412(r)(3), provides that the Administrator shall promulgate, not later than 24 months after November 15, 1990, an initial list of 100 substances which, in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment.

3. Section 112(r)(7)(A) of the Act, 42 U.S.C. § 7412(r)(7)(A), provides that in order to prevent accidental releases of regulated substances, the Administrator is authorized to promulgate release prevention, detection, and correction requirements which may include monitoring, record-keeping, reporting, training, vapor recovery, secondary containment, and other design, equipment, work practice, and operational requirements.

4. Section 112(r)(7)(B)(i) of the Act, 42 U.S.C. § 7412(r)(7)(B)(i), provides that

within 3 years after November 15, 1990, the Administrator shall promulgate reasonable regulations and appropriate guidance to provide, to the greatest extent practicable, for the prevention and detection of accidental releases of regulated substances and for response to such releases by the owners or operators of the sources of such releases.

5. Section 112(r)(7)(B)(ii) of the Act, 42 U.S.C. § 7412(r)(7)(B)(ii), provides that the regulations under this subparagraph shall require the owner or operator of stationary sources at which a regulated substance is present in more than a threshold quantity to prepare and implement a Risk Management Plan (RMP) to detect and prevent or minimize accidental releases of such substances from the stationary source, and to provide a prompt emergency response to any such releases in order to protect human health and the environment.

6. Pursuant to Section 112(r) of the Act, 42 U.S.C. § 7412(r), the Administrator initially promulgated a list of regulated substances, with threshold quantities for applicability, at 59 Fed. Reg. 4493 (January 31, 1994), which is codified, as amended, at 40 C.F.R. § 68.130.

7. Pursuant to Section 112(r) of the Act, 42 U.S.C. § 7412(r), the Administrator promulgated "Accidental Release Prevention Requirements: Risk Management Programs Under Clean Air Act Section 112(r)(7)," 61 Fed. Reg. 31668 (June 20, 1996), which is codified, as amended, at 40 C.F.R. Part 68: Chemical Accident Prevention Provisions (CAPP).

8. The CAPP seek to prevent accidental releases of regulated substances and minimize the consequences of those releases that do occur, by requiring owners and operators of certain stationary sources to, among other things: (1) develop and implement a management system to oversee the implementation of the risk management program elements; (2) develop and implement a risk management program that includes, but is not limited to, a hazard assessment, a prevention program, and an emergency response program; and (3) submit to EPA a RMP describing the risk management program for the source. *See* 40 C.F.R. Part 68, Subparts A-G, 40 C.F.R. §§ 68.1-68.195.

9. Section 112(r)(7)(E) of the Act, 42 U.S.C. § 7412(r)(7)(E), provides that after the effective date of any regulation or requirement promulgated pursuant to Section 112(r) of the Act, it shall be unlawful for any person to operate any stationary source in violation of such regulation or requirement.

B. Chemical Accident Prevention Provisions

1. Applicability

10. Section 68.10(a) of the CAPP provides, in part, that the owner or operator of a stationary source that has more than a threshold quantity of a regulated substance

in a process, as determined under 40 C.F.R. § 68.115, shall comply with the requirements of the CAPP no later than the date on which a regulated substance is first present above a threshold quantity in a process. See 40 C.F.R. § 68.10(a)(3).

11. Section 68.3 of the CAPP provides that "regulated substance" means any substance listed pursuant to Section 112(r)(3) of the Act at 40 C.F.R. § 68.130.

12. Section 68.3 of the CAPP provides that "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purposes of that definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process. See 40 C.F.R. § 68.3.

13. Section 68.3 of the CAPP provides that "covered process" means a process that has a regulated substance present in more than a threshold quantity as determined under § 68.115. See 40 C.F.R. § 68.3.

14. Table 1 at Section 68.130(a) of the CAPP lists anhydrous ammonia as a regulated toxic substance with a threshold quantity of 10,000 pounds.

15. Section 68.3 of the CAPP provides that "process" means "any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities." For purposes of this definition, a single process includes "any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release."

16. Section 68.3 of the CAPP provides a "covered process" means "a process that has a regulated substance present in more than a threshold quantity as determined under § 68.115."

17. Section 68.3 of the CAPP provides that an "environmental receptor" means natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and Federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints provided in 40 C.F.R. § 68.22(a), as a result of an accidental release and that can be identified on local U. S. Geological Survey maps.

18. Section 68.3 of the CAPP provides that "public" means any person except employees or contractors at the stationary source.

19. Section 68.3 of the CAPP provides that a "public receptor" means offsite residences, institutions (e.g., schools, hospitals), industrial, commercial, and office buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public

could be exposed to toxic concentrations, radiant heat, or overpressure, as a result of an accidental release.

20. Section 68.12 of the CAPP defines three "Program levels" based on processes' relative potential for public impacts and the level of effort needed to prevent accidents. For each Program level, the rule defines requirements that reflect the level of risk and effort associated with the processes at that level.

21. Section 68.10(g) of the CAPP provides that a covered process is subject to Program 1 requirements if all of the following conditions are met: 1) for five years prior to the submission of an RMP, the process has not had an accidental release of a regulated substance, overpressure generated by the substance or radiant heat generated by a fire involving the substance that lead to offsite death, injury, or response or restoration activities for an exposure of an environmental receptor; 2) the distance to a toxic or flammable endpoint for a worst-case release assessment is less than the distance to any public receptor; and 3) emergency response procedures have been coordinated between stationary source and local emergency planning and response organizations.

22. Section 68.10(i) of the CAPP provides, in part, that a covered process is subject to Program 3 requirements if the process does not meet the Program 1 eligibility requirements at 40 C.F.R. § 68.10(g) and if either of the following conditions is met: (1) the process is in NAICS code 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311, or 32532; or (2) the process is subject to the U.S. Occupational Safety and Health Administration (OSHA) process safety management standard, 29 C.F.R. § 1910.119.

23. Section 68.12(a) and (d) of the CAPP identify the CAPP requirements that the owner or operator of a stationary source with a process subject to Program 3 must meet, which include, among other provisions, to develop and implement a management system as provided in § 68.15; conduct a hazard assessment as provided in §§ 68.20 through 68.42; implement the prevention requirements of §§ 68.65 through 68.87; coordinate response actions with local emergency planning and response agencies as provided in § 68.93; develop and implement an emergency response program, as provided in §§ 68.90 through 68.96; submit a single RMP, as provided in §§ 68.250 to 68.185, that includes a registration that reflects all covered processes; and submit as part of the RMP the data on prevention program elements for Program 3 processes as provided in § 68.175

2. Process Safety Information

24. Section 68.65 of the CAPP requires the owner or operator of a stationary source with a process subject to Program 3 to complete a compilation of written process safety information before conducting any process hazard analysis required by the rule. Process safety information shall include information pertaining to the hazards of the regulated substances used or produced by the process, information

on the technology of the process, and information pertaining to the equipment in the process.

25. Section 68.65(c)(1)(iv) of the CAPP requires information pertaining to the technology of the process to include safe upper and lower limits for such items as temperatures, pressures, flows or compositions.

26. Section 68.65(c)(1)(v) of the CAPP requires information pertaining to the technology of the process to include an evaluation of the consequences of deviations.

27. Section 68.65(d)(1)(vi) of the CAPP requires information pertaining to the equipment in the process to include design codes and standards employed.

28. Section 68.65(d)(1)(viii) of the CAPP requires information pertaining to the equipment in the process to include safety systems.

3. Process Hazard Analysis

29. Section 68.67(e) of the CAPP provides that the owner or operator shall establish a system to promptly address the team's findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.

4. Operating Procedures

30. Section 68.69(a) of the CAPP provides, in part, that the owner or operator of a stationary source with a process subject to Program 3 shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with process safety information and that address at least the elements in 40 C.F.R. § 68.69(a)(1) through (4).

31. Section 68.69(a)(1)(iv) of the CAPP provides, in part, that the owner or operator of a stationary source with a process subject to Program 3 shall develop and implement written operating procedures that address steps for each operating phase: (i) Initial startup; (ii) Normal operations; (iii) Temporary operations; (iv) Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner; (v) Emergency operations; (vi) Normal shutdown; and (vii) Startup following a turnaround, or after an emergency shutdown.

32. Section 68.69(a)(3)(i) of the CAPP provides, in part, that the owner or operator of a stationary source with a process subject to Program 3 shall develop and implement written operating procedures that address safety and health considerations including the properties of, and hazards presented by, the chemicals used in the process.

33. Section 68.69(a)(4) of the CAPP provides, in part, that the owner or operator of a stationary source with a process subject to Program 3 shall develop and implement written operating procedures that address safety systems and their functions.

5. Mechanical Integrity

34. Section 68.73(d)(1) of the CAPP provides that inspections and tests shall be performed on process equipment.

35. Section 68.73(d)(3) of the CAPP provides that frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

36. Section 68.73(d)(4) of the CAPP provides the owner or operator shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

37. Section 68.73(e) of the CAPP provides the owner or operator shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information at 40 C.F.R. § 68.65(a)) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

II. Statement of Facts and Explanation of Violations

A. Applicability

38. CF Industries owns and operates an ammonia terminal at 737 E. DuPont Road, Seneca, IL 61360 (Facility).

39. The Facility unloads anhydrous ammonia from barges to storage tanks and offloads the anhydrous ammonia to trucks at a loading rack.

40. The Facility maintains a maximum inventory of 60,000,000 pounds of the regulated toxic substance anhydrous ammonia, which exceeds the threshold quantity of 10,000 pounds of anhydrous ammonia as set forth in Table 1 at 40 C.F.R. § 68.130.

41. CF Industries conducts a process, as defined in 40 C.F.R. § 68.3, that includes the use, storage, handling, and on-site movement of anhydrous ammonia, which is a regulated substance.

42. CF Industries' process at the facility has had a regulated substance present in more than a threshold quantity as determined under 40 C.F.R. § 68.115 since at least 1999.

43. The covered process at the Facility is subject to the OSHA process safety management standard because it contains greater than the threshold quantity of 10,000 pounds of anhydrous ammonia that is a highly hazardous chemical as defined in 29 C.F.R. § 1910.119(b).

44. CF Industries' ammonia terminal process at the Facility does not meet the Program 1 requirements at 40 C.F.R. § 68.10(g).

45. The Facility is subject to the requirements of the CAPP in accordance with 40 C.F.R. § 68.1 *et seq.*

46. The facility is subject to Program 3 because the process is subject to the OSHA process safety management standard, 29 C.F.R. § 1910.119, in accordance with 40 C.F.R. § 68.10(i), and does not meet the Program 1 eligibility requirements at 40 C.F.R. § 68.10(g).

47. CF Industries' ammonia terminal process at the Facility was and is a "process," as that term is defined at 40 C.F.R. § 68.3.

48. CF Industries' ammonia terminal process at the Facility was and is a "covered process," as that term is defined at 40 C.F.R. § 68.3.

B. Facility Inspection

49. On July 7, 2021, EPA conducted an announced inspection of CF Industries' facility (July 2021 inspection).

50. During the July 2021 inspection, EPA inspectors reviewed numerous documents provided by CF Industries. The documents included aspects of its RMP involving the management system, process safety information, process hazard analysis, operating procedures, training, mechanical integrity, management of change, pre-startup safety review, compliance audits, hot work permits, employee participation, and contractors.

1. Process Safety Information

51. CF Industries' process safety information failed to include the safe upper and lower limits for such items as temperatures, pressures, flows or compositions. The upper and lower operating limits are referenced in the operating procedures, but safe equipment limits, and safe operating limits are not the same.

52. Since CF Industries has not accurately compiled the safe upper and lower limits, an evaluation of the consequences of deviating from these limits is not accurate or complete.

53. CF Industries' process safety information failed to include the following information:

    a. Design codes and standards employed;
    b. Safety systems.

2. Process Hazard Analysis

54. During the July 2021 inspection, EPA reviewed the most recent Process Hazard Analysis (PHA).

55. CF Industries followed the "Hazard and Operability Study (HAZOP)" methodology for the PHA.

56. There were multiple recommendations from the PHA. The Facility rejected some of these recommendations and did not document why these were rejected or how the process remains safe without completion of those PHA recommendations.

3. Operating Procedures

57. During the July 2021 inspection, CF Industries provided EPA its written operating procedures.

58. CF Industries' written operating procedures had numerous errors in the references and did not provide clear instructions to safely operate the process.

59. CF Industries' written operating procedures did not address steps for initial startup and shutdown following a turnaround.

60. CF Industries' written operating procedures did not address the physical properties of the anhydrous ammonia used in the process or the safety systems and their functions.

4. Mechanical Integrity

61. During the July 2021 inspection, CF Industries could not provide documentation of design information and the tank inspection for V-103.

62. During the July 2021 inspection, CF Industries stated that tank inspections for T-101 had been deferred twice. The tank was due for an inspection in 2019. The

inspection was postponed to 2020. The inspection was then postponed again in 2020 with plans to perform the inspection in 2021.

63. CF Industries informed EPA that they have not performed API-570 inspections of the underground piping.

64. During the July 2021 inspection, EPA reviewed inspections of aboveground piping and noted that CF Industries did not repair pipes according to API-570.

III. CAPP Violations

Based on the July 2021 inspection conducted by EPA and the information reviewed, EPA has determined that CF Industries is in violation of the following CAPP requirements at the Facility:

1. Process Safety Information

65. CF Industries failed to include in its process safety information the safe upper and lower limits for the Facility's Program 3 process, in violation of 40 C.F.R. § 68.65 (c)(1)(iv).

66. CF Industries failed to include in its process safety information an evaluation of the consequences of deviations for the Facility's Program 3 process, in violation of 40 C.F.R. § 68.65(c)(1)(v).

67. CF Industries failed to include in its process safety information the design codes and standards employed for equipment that is part of the Facility's Program 3 process, in violation of 40 C.F.R. § 68.65 (d)(1)(vi).

68. CF Industries failed to include in its process safety information the safety systems for the Facility's Program 3 process, in violation of 40 C.F.R. § 68.65(d)(1)(viii).

2. Process Hazard Analysis

69. CF Industries failed to establish a system to promptly address PHA findings and recommendations; assure that the recommendations are resolved in a timely manner and that the resolution is documented; document what actions are to be taken; complete actions as soon as possible; develop a written schedule of when these actions are to be completed; communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions, in violation of 40 C.F.R. § 68.67(e).

3. Operating Procedures

70. CF Industries failed to develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each

covered process consistent with process safety information, in violation of 40 C.F.R. § 68.69(a).

71. CF Industries failed to develop and implement written operating procedures that addressed steps for initial startup, in violation of 40 C.F.R. § 68.69(a)(1)(i).

72. CF Industries failed to develop and implement written operating procedures that addressed steps for startup following a turnaround, in violation of 40 C.F.R. § 68.69(a)(1)(vii).

73. CF Industries failed to develop and implement written operating procedures that address safety and health considerations including the properties of, and hazards presented by, the chemicals used in the process, in violation of 40 C.F.R. § 68.69(a)(3)(i).

74. CF Industries failed to develop and implement written operating procedures that address safety systems and their functions, in violation of 40 C.F.R. §68.69(a)(4).

4. Mechanical Integrity

75. CF Industries failed to perform inspections and tests on process equipment, in violation of 40 C.F.R. § 68.73(d)(1).

76. CF Industries failed to establish the frequency of inspections and tests of process equipment consistent with applicable manufacturers' recommendations and good engineering practices, in violation of 40 C.F.R. § 68.73(d)(3).

77. CF Industries failed to include description of the inspection or test performed and the results for inspection or test in documentation of inspections and tests, performed on covered process equipment, in violation of 40 C.F.R. § 68.73(d)(4).

78. CF Industries failed to correct deficiencies in equipment that was outside acceptable limits before further use or in a safe and timely manner, in violation of 40 C.F.R. § 68.73(e).

III. Clean Air Act Violations

79. Pursuant to Section 112(r)(7)(E) of the Act, the above-described violations of the regulations and requirements of 40 C.F.R. Part 68, are violations of the Act.

MICHAEL HARRIS Digitally signed by MICHAEL HARRIS
Date: 2022.09.29 10:33:43 -05'00'

Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MEMORANDUM

SUBJECT: Recommendation to Issue a Finding of Violation to CF Industries Distribution, Seneca, Illinois.

FROM: Sara J. Breneman
Chief
Air Enforcement and Compliance Assurance Branch

TO: Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division

I recommend that you issue a Finding of Violation (FOV) to CF Industries Distribution (CF Industries) for violating the Chemical Accident Prevention Provisions (CAPP) at 40 C.F.R. Part 68. CF Industries owns and operates an ammonia terminal in Seneca, Illinois.

Specifically, CF Industries failed to implement or develop process safety information, process hazard analysis, operating procedures, and mechanical integrity requirements in violation of the CAPP and Program 3 Prevention Program. We discovered these violations based on information provided by CF Industries during the July 7, 2021 inspection.

State Representative Contacted: _____

Date: _____

By: _____